

Abstract of the Disclosure

A selective catalytic reduction apparatus has at least first and last catalyst layers in series for reducing nitrogen oxides in a flue gas, at least one interstage heat exchanger located after the first layer and before the last layer, that lowers flue gas temperature, and that acts as a mixing body to lower the standard deviation of the NH_3/NO ratio entering catalyst layers after the first catalyst layer, thus providing better consumption of both ammonia and NO_x in the reactor than would be achieved in the absence of the at least one interstage heat exchanger.